

REMARKS

I. Summary of the Office Action and this Reply

Claims 1-36 are pending. The Examiner has rejected claims 1-15, 22-26 and 33-36 under 35 U.S.C. § 103(a), asserting that those claims are obvious in view of U.S. Patent No. 6,272,523 to Factor ("Factor"). The Examiner has rejected claims 16-19 under 35 U.S.C. § 103(a), asserting that those claims are obvious over Factor in view of U.S. Patent No. 6,134,588 to Guenthner et al. ("Guenthner"). The Examiner has rejected claims 20 and 21 under 35 U.S.C. § 103(a), asserting that those claims are obvious over Factor in view of Guenthner, and further in view of U.S. Patent No. 6,685,332 to Douglas ("Douglas").

Applicants thank the Examiner for the recognition of allowable subject matter in claims 27-32.

II. Discussion

The Present Invention

The present invention is directed to a computer implemented method and apparatus for retrieving files in a network using certain placeholders/identifiers ("logical references") that are distinct from conventional URLs/electronic addresses/physical references. The logical references appear in a source file, namely, the same source file that is interpretable by a browser to display a web page, etc. Accordingly, a hyperlink displayed by a browser is directly associated with a logical reference that is contained in the source file interpretable to display that hyperlink. This is in contrast to the conventional arrangement in which a hyperlink displayed by a browser is directly associated with a physical reference/URL/electronic address in the source file.

This association of a logical reference in a parent file with a hyperlink provides an indirect relationship between a hyperlink and a physical reference. This allows the list of physical references corresponding to the logical reference to be updated (which may be maintained outside of the parent file), without the need to update the parent file itself (which can contain a single logical reference that can later be matched with a current list of physical references). Accordingly, outdated address information and broken links can be eliminated.

U.S. Patent No. 6,272,523 to Factor

Factor discloses a load balancing technique for use in a client/server environment that uses a "logical server process." Client devices 36 communicate with the logical server processes/web sites 38, 40. See Figure 3. Each server 38, 40 includes its own logical interface systems 42, 44 that includes a selection function that maps a logical process to a physical resource. In this manner, requests directed to a single logical server process/web site 38 can load balance across multiple individual servers 1A, 1B, 1C supporting that logical server 38. Accordingly, if a client 36 wants to access data on server 1A, 1B or 1C, the client does not need to know the exact physical address of server 1A, 1B or 1C. Instead, the client only needs to know the exact address of server 38, which will distribute the request to server 1A, 1B or 1C. See Figure 3; col. 6, lines 10-32.

III. Response to 103 Rejections

The Examiner has rejected claims 1-26 and 33-36 under 35 U.S.C. §103(a), asserting obviousness in view of Factor, Guenther and/or Douglas.

A section 103 rejection is proper only if all claim limitations are taught or suggested by the cited art. Moreover, even if all elements are found in the cited art, there still must be motivation, either in the reference or in the knowledge generally available to one of ordinary skill in the art, to make the proposed modification to the cited art. MPEP §2143.

Claims 1-15, 22-26 and 33-36

Claim 1 is directed to a method that involves receipt of a user's selection of a hyperlink displayed by a browser. The hyperlink displayed by the browser is associated with a logical reference contained in a parent file. The parent file is the same file that was interpreted by the browser to display the hyperlink. Accordingly, claim 1 recites that the logical reference appears in a particular place, namely, in a file interpreted to display a hyperlink associated with the logical reference. Contrary to the Examiner's assertion on page 3 of the Action, this is neither taught nor suggested by Factor. Furthermore, even if Factor discloses a mapping table that includes a logical reference and that is downloaded to a client, such a mapping table is not interpretable to display a hyperlink. Further Factor neither teaches nor suggests that there is any hyperlink associated with any logical reference in the mapping table. Further, there is no motivation in Factor, etc. to modify the mapping table to be a file interpretable by a browser to display a hyperlink.

Additionally, claim 1 recites that the parent file includes a "logical reference." As used herein, a "logical reference" uniquely identifies a file independently of an electronic address at which the file is located, and is location independent. See application, pages 11 and 6. Such a logical reference is not an electronic address, network address, or URL of a conventional type. Instead, such a logical reference is

simply a placeholder that can be matched with a conventional electronic address, etc. of a file. See, e.g., Reply to Office Action dated October 28, 2003. This logical reference has been repeatedly contrasted with a traditional electronic address/URL that is a "physical reference," in that it provides information required for identifying, locating, retrieving and/or transmitting a desired file, e.g., by identifying a file's location on a server identified in the electronic address.

The Examiner asserts on page 3 of the Action that Factor discloses a logical reference, citing col. 6, lines 20-60. Applicants submit that Factor does not disclose the claimed logical reference. Referring now to Factor, the address of server 38 that must be known to the client 36 must be a physical address, e.g. a URL or IP address, and not a "logical address" as that term is used herein. This should not be confused with the terminology in Factor, which refers to the address of server 38 as a "logical address." In Factor, the "logical address" of server 38 is a physical address of server 38, in that the physical address includes all information necessary for the client 36 to have a network communication with server 38, which is located across the network from client 36. The physical address of server 38 corresponds to individual physical addresses of servers 1A, 1B and 1C. See Figure 3; col. 6, lines 10-32.

For at least these reasons, reconsideration and withdrawal of the rejection of claim 1 are requested respectfully

Claim 2-9 depend from claim 1 and are likewise patentable. In addition, claim 5 recites that the list of physical references is appended to a parent file. As discussed above, Factor neither teaches nor suggests a parent file, which is the file that includes the logical reference and is interpretable to display a hyperlink associated with the logical reference. There is no disclosure or suggestion in Factor

that the mapping table is part of any parent file. Amended claim 6 recites that the parent file is modified to include the physical references responsive to the request for the parent file.

Amended claims 10 and 14 are patentable for similar reasons. In addition, amended claims 10 and 14 recite that the logical address is independent of a network address. As discussed above with respect to claim 1, the address in Factor that is known to the client 36 and that refers to a server such as server 38 must be a physical network address, e.g. a URL or IP address, and therefore is not a "logical address". Accordingly, use of a logical address that is independent of a network address is neither taught nor suggested by Factor. Claims 22-26 are patentable for similar reasons.

Claims 33-36 recite that the logical reference is independent of a URL, and thus are patentable for similar reasons.

Further, claim 10 recites that the parent file containing the logical reference is modified to include a list of physical references corresponding to each logical reference. This is neither taught nor suggested by Factor. To the contrary, Factor discloses that a separate download to the client may occur, when a logical process is selected, i.e. after the initial selection of the logical process. See Col. 6, lines 33-47. Claims 11, 12, 13 depend therefrom and are likewise patentable.

Claim 14 recites that the parent file includes both the logical reference and the list of corresponding physical references. This is neither taught nor suggested by Factor. To the contrary, Factor discloses that any downloaded file/mapping is separate. Claim 15 depends from claim 14 and is likewise patentable.

Claims 16-21


Claim 16 has been amended to recite that the logical reference is independent of a network address, and is stored in a parent file that is interpretable to display a hyperlink, and therefore is believed patentable for at least reasons similar to those set forth above. Claims 17-21 depend from claim 16 and are likewise patentable.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants believe claims 1-36 to be patentable and the application in condition for allowance. Applicants respectfully request issuance of a Notice of Allowance. If any issues remain, the undersigned requests a telephone interview prior to the issuance of an action.

Respectfully submitted,

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